Palletization and Wood Treatment

Presented by:

DCMAC-JP

Revision 2, Date 2 July, 2007

Agenda

- **MIL-HDBK-774A**
- **DLA Palletization Clause**
- **Wood Treatment for DOD contracts**
- **Summary**
- **Quiz**

DCMA
Defense Contract Management Agency

MIL-HDBK-774A

- **New designation for Mil-Std-147**
- **For Guidance Purposes & Not Contractually binding**
- **This standard establishes the methods, materials, and techniques to be employed in the formation of bonded palletized unit loads of military supplies, which are adaptable to unit loading.**
- **The methods prescribed are to be utilized with a standard, general purpose, 40- by 48-inch pallet.**

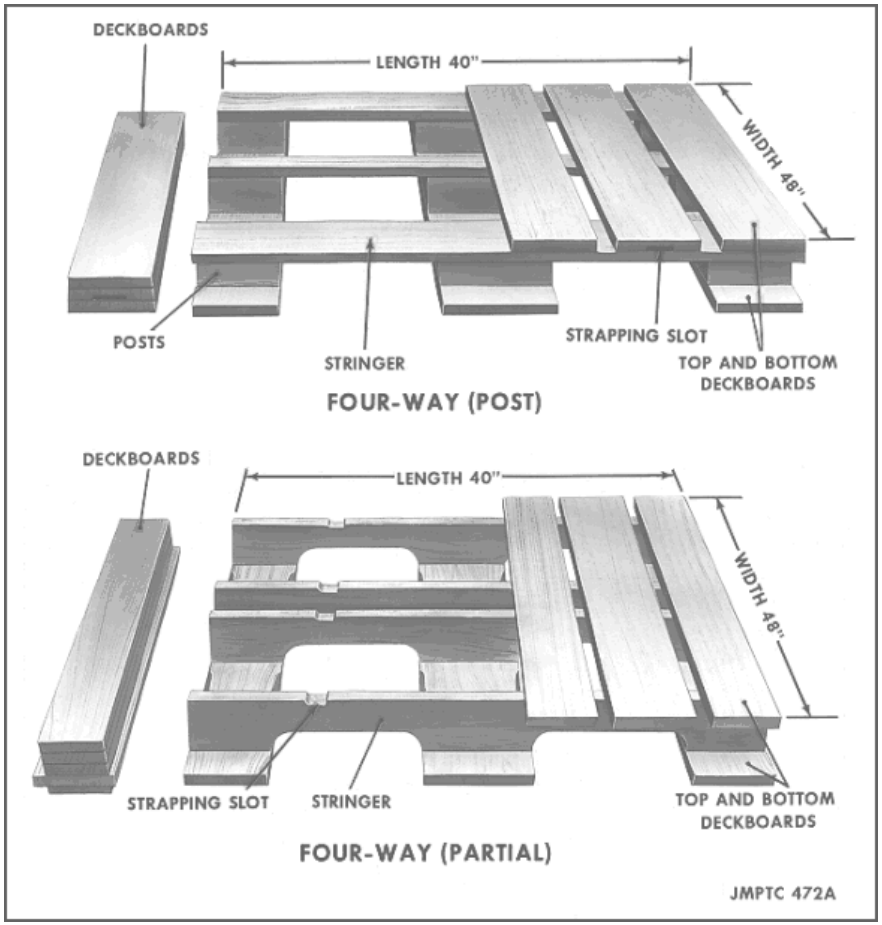
MIL-HDBK-774A

- **Definitions**

  - **<u>Pallet</u>. A low, portable, horizontal platform device used as a base for assembling, storing, handling, and transporting materials and products in a unit load.**

  - **<u>Palletized Unit Load</u>. Quantity of any item, packaged or unpackaged, which is arranged on a pallet in a specified manner and securely strapped or fastened thereto so that the whole is handled as a unit.**

MIL-HDBK-774A

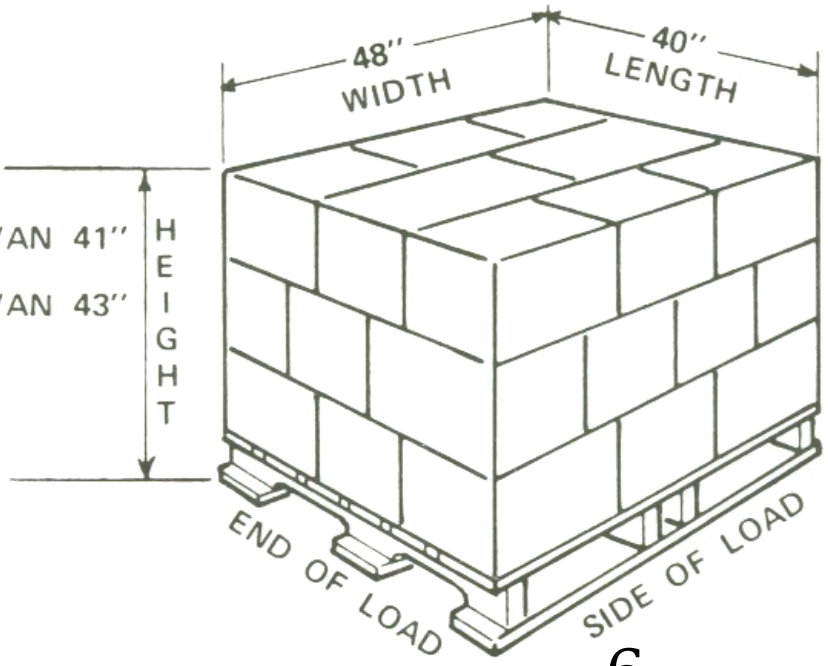


- **Standard Pallet – 40” x 48”**
- **Facilitates Handling & Transportation**
- **Used for several trips**
- **Two-Way or Four-Way Entry**
- **Four-Way preferred**
- **Mil-P-15011 or NX-P**

MIL-HDBK-774A

Palletized Unit Load

- Standard Pallet Loads on a 40” x 48” pallet
  - 43 Inches in Length
  - 52 Inches in Width
  - 54 Inches in Height
  - 3000 Lbs. Maximum Gross Weight



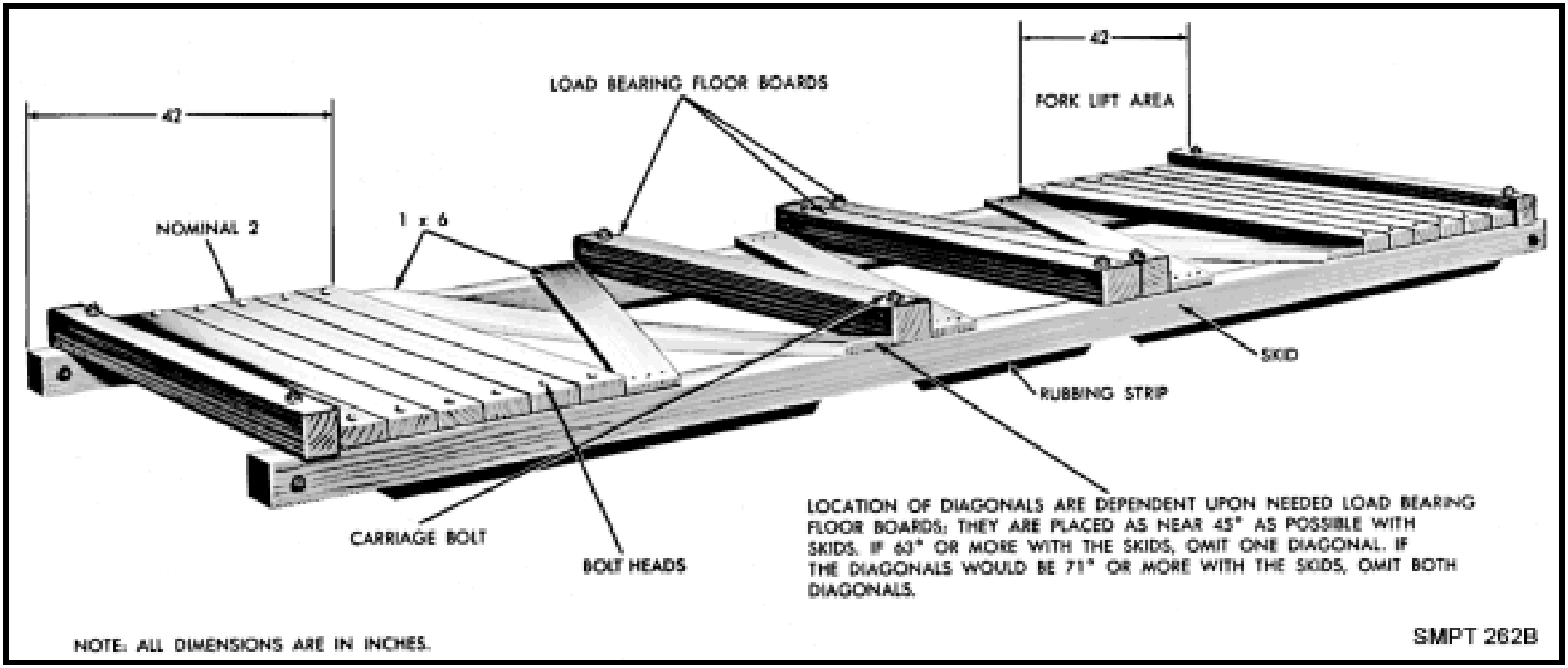
MIL-HDBK-774A

Palletized Unit Load

- **Arrange to eliminate voids & spaces**
- **Provide a level top for stacking**
- **Bond to the Pallet using:**
  metallic & nonmetallic strapping, stretch or shrink
  film
- **Protect with storage aids using:**
  edge protectors, fiberboard or wood caps & trays,
  wood battens or frames

Skid Vs. Pallet

MIL-C-3774B
CRATES, WOOD; OPEN 12,000- AND 16,000-POUND CAPACITY
SKID BASE


42
42
LOAD BEARING FLOOR BOARDS
FORK LIFT AREA
NOMINAL 2
1 x 6
SKID
RUBBING STRIP
CARRIAGE BOLT
BOLT HEADS
LOCATION OF DIAGONALS ARE DEPENDENT UPON NEEDED LOAD BEARING FLOOR BOARDS; THEY ARE PLACED AS NEAR 45° AS POSSIBLE WITH SKIDS. IF 63° OR MORE WITH THE SKIDS, OMIT ONE DIAGONAL. IF THE DIAGONALS WOULD BE 71° OR MORE WITH THE SKIDS, OMIT BOTH DIAGONALS.
NOTE: ALL DIMENSIONS ARE IN INCHES.
SMPT 262B

For Military Definition - Skids do not have Bottom Deck Boards

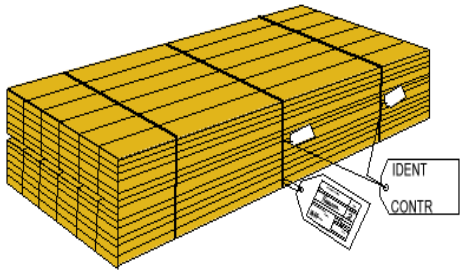
DLA Palletization Clause

52.211-9G22 Palletization I/A/W D00145000 Rev C

- **Required I/A/W MIL-HDBK-774 when 250 lbs. or greater or 20 Cu. Ft. or greater**
- **All pallets shall be new & unused**
- **Heat treatment process is required for all NMWP**
- **Shrink wrap not authorized for Hazmat**
- **Stretch wrap, shrink film & nonmetallic strapping is not authorized for “Export Shipments”**
- **Commercial pallets can be used under specified conditions.**

Wood Treatment

Non Manufactured Wood Products (NMWP)



- Wood Members Cut From Trees – Planks and Posts
- All wood, all species used in construction for boxes, pallets and skids or any other type of shipping container.
- Includes dunnage, blocking and bracing

Fiberboard, Plywood, OSB, and Particle Board are Manufactured Wood Products

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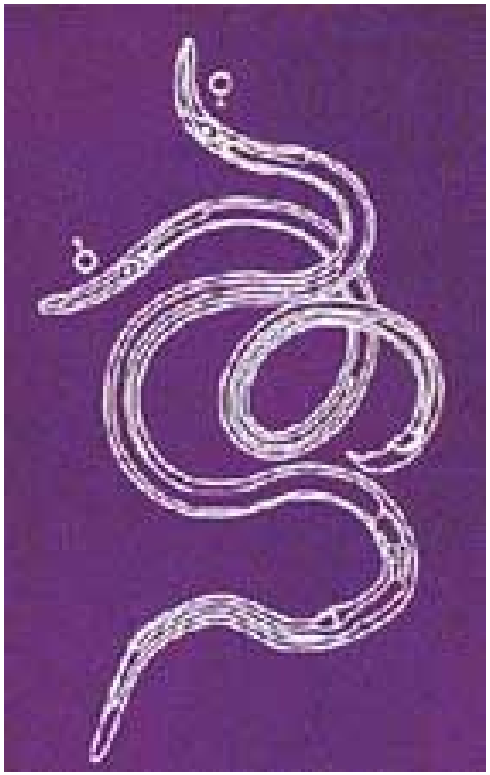
Wood Treatment

The Pinewood Nematode

- Microscopic Parasitic Eelworm
- Japan - Early 1900's Missouri -
- Carried by Longhorned Beetles
- Blocks Resin Canals
- Trees Show Damage within 4 to
  Wilting
  Needle Discoloration
- Trees Die Within 3 Months



Wood Treatment

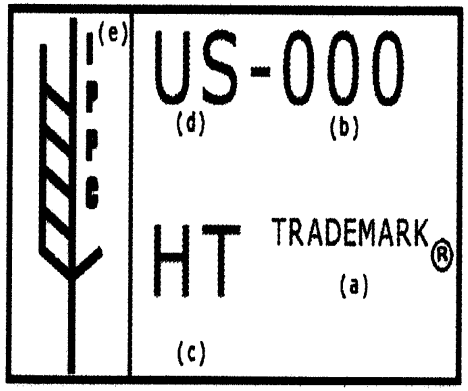
- **Untreated Non-Manufactured Wood Products will not be used to make shipments to:**
  - **Shipments going OCONUS.**
  - **Shipments going into the Defense Transportation System**
  - **Foreign Military Sales (FMS) shipments**

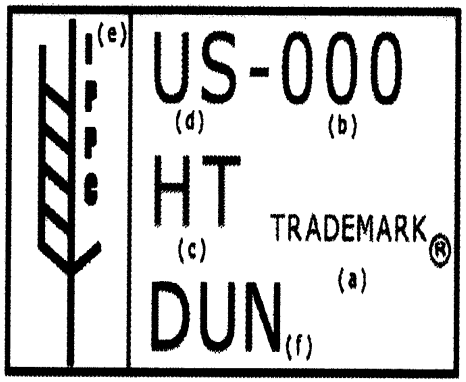
Wood Treatment

- **All wooden pallets and wood containers produced entirely or in part of non-manufactured wood shall be constructed from Heat Treated (HT to 56 degrees Centigrade for 30 minutes) material and certified according**

Wood Treatment
Heat Treatment (HT)Certification Stamp

Interpreting a Quality Mark





a. *Trademark* – the identifying symbol, logo,or name of the accredited agency
b. *Facility Identification* – product manufacturer name, brand or assigned facility number
c. *Heat Treated* mark
d. *Country Code* – the two letter ISO country abbreviation
e. Approved International symbol for compliant wood packaging material
f. Indication for use as dunnage (may be spelled out fully)

Wood Treatment

Regulation Link

- **The American Lumber Standard Committee Incorporated Wood Packaging Material Enforcement Regulations website:**

http://www.alsc.org/greenbook%20collection/WPM_Enforcement_Regulations.pdf

- **The United States Department of Agriculture, Animal & Plant Health Inspection Service website:**

http://www.aphis.usda.gov/index.shtml

Summary

- **MIL-HDBK-774A is a a guide for Military Palletization.**
- **DLA has contract Palletization Clauses.**
- **Heat Treatment is used to prevent the spread of the Pinewood Nematode**
- **Non-Manufactured Wood Products such as dunnage and blocking are also required to be Heat Treated.**
- **The Heat-Treated Certification Stamp is required**

Quiz

1. **What has MIL-STD-147 for Palletized Unit Loads been redesignated to?**

   a) MIL-HDBK-774A

   b) MIL-BK-447B

   c) MIL-HDBK-147

   d) PUL 147

Quiz

2. **What is the maximum height of a standard pallet load, including the pallet?**

   a) 64 in.

   b) 72 cm.

   c) 8.8 ft.

   d) 54 in.

Quiz

3. **What is the maximum gross weight for a standard pallet?**

   a) 1000lbs.

   b) 2000 lbs.

   c) 3000 lbs.

   d) 4000 lbs.

Quiz

4. **What types of wood and wood products can not get infested with the pinewood nematode?**

   a) Softwoods

   b) Hardwoods

   c) Two by fours

   d) Manufactured

Quiz

5. **Under current DOD rules, do shipments to Defense Depot (DD) New Cumberland and DD Memphis require heat treatment of wood products?**

   a) Yes

   b) No